

Arboricultural Survey

Land at North End Road
Yapton
West Sussex

27th November 2019



PJC ref: 5401/19-01 Rev -

This report has been prepared by

PJC Consultancy Ltd

on behalf of

Dandara Ltd

**Prepared
by**

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Peter has a Foundation Degree in Arboriculture from the University of Brighton and is a professional member of the Arboricultural Association. He has over ten years experience in the arboricultural industry, originally working as a groundsman and feller, and progressing into consultancy. He is a Lantra accredited professional tree inspector.

**Checked
by**

Lewis Rumsey FdSc Arboriculture

Lewis is an arboriculturist with several years' experience working within the arboricultural and forestry industry. He gained a foundation degree in arboriculture with distinction from the University of Brighton in 2017 and is a member of the Institute of Chartered Foresters.

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1 INTRODUCTION

1.1 Instruction: PJC Consultancy has been instructed by Dandara Ltd to provide an initial arboricultural survey of land adjacent to North End Road in Yapton, West Sussex. The survey is to be undertaken in accordance with BS5837: 2012 '*Trees in relation to design, demolition and construction – Recommendations*'.

1.2 Survey objectives: This survey has been undertaken with the following objectives:

- To record a schedule of significant trees (dimensions and locations) situated at the prospective development site.
- To assess the quality and value of the existing tree stock in terms of arboricultural, landscape, historical/conservation, or public amenity value.
- To provide information relating to planning constraints that may restrict works to trees at the site.
- To provide an assessment of the material constraints posed by the existing tree stock on potential future developments at the site.
- To aid the design process, ensuring prospective developments integrate appropriately with the existing tree stock, to maximise the potential of the proposed development site.

1.3 Scope of this report: This report is concerned with all significant trees and arboricultural features located within the site boundary. Additionally, trees located around the curtilage of the site have also been surveyed when they are considered likely to have the potential to impact on the development (in relation to root and crown protection or foundation design).

1.4 Contents of report: This report includes the following:

- A summary of the existing tree stock and notable arboricultural features.
- Tree Constraints Plan in accordance with BS5837: 2012.
- Tree Survey Schedule containing the relevant measurements and information for each tree or tree group as required in BS5837: 2012.

1.5 Documents and information provided: The following documents were used to aid the preparation of this report:

- Drawing ref. 26714 – Topographical Survey (MK Surveys)

2 SITE VISIT AND SURVEY METHODOLOGY

2.1 Site visit: A site visit was carried out on 25th November 2019. The weather conditions at the time were cloudy with occasional light rain showers, however the visibility was adequate for visual tree inspection from ground level.

2.2 Tree survey information: The following information was recorded in the Tree Survey Schedule for each individual tree (average dimensions are recorded for groups):

- Tree reference number. (T=tree, G=group, H=hedgerow). Tree numbers suffixed with PA on the Tree Constraints Plan indicate the trees location was not included on the topographical survey provided so the tree's position is approximate.
- Species (common and scientific name).
- Overall tree height (m).
- Stem diameter (mm) per stem or average diameter for multi-stemmed trees with six or more stems.
- Branch spread (m) measured to the four cardinal points.
- Existing height (m) above ground level of lowest significant branch and direction of growth (for individual trees only).
- Existing height (m) above ground level of canopy.
- Age class (young, semi mature, early mature, mature, over mature or veteran).
- Physiological condition (good, fair, poor).
- Structural condition (good, fair, poor).
- Comments (general description of tree(s) including any notable features).
- Preliminary management recommendations (prescriptions for tree management processes based on the current land use and not related to the prospective development).
- Tree categorisation (see below).
- Root protection area (m²).
- Root protection radius (m).

2.3 Tree categorisation: The condition and value of each tree was evaluated based on the current land use. Each tree or tree group has been awarded either category A, B, C or U and a sub category of either 1,2 or 3 or a combination of the sub categories.

2.4 Tree categorisation summary:

- A – Trees of good condition and high arboricultural, landscape or conservation value. Must have a potential life span in excess of forty years.
- B – Trees of moderate condition, with minor defects or sub-optimal form but are still of modest arboricultural, landscape or conservation value. Must have a potential life span in excess of twenty years.
- C – Unremarkable trees of poor condition or form with limited arboricultural, landscape or conservation value, or trees with a stem diameter under 150mm. Must have a potential life span in excess of ten years.
- U – Trees of such impaired condition that they cannot realistically be retained as living trees in the context of the current land use for more than ten years. These trees do not need to be removed if they are not dangerous and do not conflict with the proposed development, but should not be considered a constraint to development.

2.5 Tree sub categorisation summary:

- 1 – Trees have mainly arboricultural value, e.g. trees of good condition, form and vitality or rare tree species.
- 2 – Trees have mainly landscape value, e.g. trees of landscape prominence, that serve to screen unsightly views or that are required for privacy. Also trees present in groups that attain higher collective rating that they would as individuals.
- 3 – Trees with mainly cultural value including conservation, e.g. commemorative trees, trees of historical significance or veteran trees.

2.6 Each tree can only be categorised as A, B or C but may comply with more than one sub category. A cascade chart further explaining how tree categorisation is decided is included in Appendix 3.

2.7 Root protection areas: A root protection area represents the minimum area of root growth required to support a tree. It is a standardised calculation based on the stem diameter(s) measured at 1.5m and is not necessarily representative of the actual root spread or total root area. The formulas used to calculate root protection areas are shown below:

Table 1: Root protection area formulas

For single stemmed trees, root protection areas are calculated as follows:

$$\text{Root protection area (m}^2\text{)} = \frac{(\text{stem diameter (mm)} \times 12)^2 \times \pi}{1000}$$

For trees with two to five stems, a combined stem diameter is calculated as follows:

$$\sqrt{(\text{stem diameter 1})^2 + (\text{stem diameter 2})^2 \cdots + (\text{stem diameter 5})^2}$$

For trees with more than five stems, the combined stem diameter is calculated as follows:

$$\sqrt{(\text{mean stem diameter})^2 \times \text{number of stems}}$$

2.8 The root protection areas are plotted onto the Tree Constraints Plan in Appendix 1, and recorded in the Tree Survey Schedule in Appendix 2. These are represented as a circle on the plan (unless significant rooting constraints are present), and are colour coded depending on the category the tree has been awarded. Where existing site conditions/features are present that are deemed likely to have affected the root morphology, the root protection areas have been represented as a polygon of equivalent area.

2.9 The proposed layout should avoid level changes or the placement of new buildings and areas of hard standing within the root protection areas of retained trees. In certain situations, engineered solutions are available to allow construction within the root protection areas however further input from an arboriculturist should be sought regarding their site-specific viability before these methods are relied upon.

2.10 The disturbance of a tree's root system can result in crown dieback and even death of the tree. Roots are used to support the tree structurally as well as the absorption of moisture and nutrients from the soil. They also act as storage and transport for water and nutrients.

2.11 Direct damage such as root severance can lead to ill health, as can compaction of the soil by construction traffic, heavy plant and storage of materials. Changing the nature of the surface above the growing medium, (i.e. from porous to non-porous), can alter the resources available to the tree, which in turn can lead to its decline.

2.12 The majority of root growth is usually found within the top 600mm of soil. As such, even a shallow disturbance within a root protection area can potentially have a significant impact on the tree.

2.13 The root protection areas must be left free from excavation and disturbance, and protected from compaction or contamination during any proposed works. Any construction works within a root protection area required for the proposed development must be justifiable within an arboricultural impact assessment.

2.14 **Limitations of survey:** The survey methodology was restricted to a visual tree assessment from ground level. No tree climbing or ground investigation was carried out for this report. Where existing site constraints are present such as ivy covered trees, a very dense under-storey, or where trees are located on third party land to which access was not granted, tree dimensions were estimated by eye as accurately as possible.

2.15 This survey represents a preliminary overview of the condition and value of trees at the site. It is not a detailed assessment of any individual tree and although preliminary management recommendations are included, this report will not be sufficient to be used as a detailed condition and safety survey.

2.16 The information and measurements in this report are representative of the date of the site visit. The tree survey data will need to be updated to reflect tree growth and changes in the condition of the trees after prolonged periods.

3 SITE DETAILS AND SURVEY FINDINGS

3.1 Site location: The site is situated on the west side of North End Road, broadly opposite the junction with Church Lane. It has a central OS national grid reference of SU 97665 03669. The surrounding land use is comprised of farmland to the north, west and south, and residential properties on North End Road and The Croft to the east. The site surrounds Yapton CE Primary School, which also fronts onto North End Road. The location of the site within its environs is shown in figure 1.



Figure 1: Location of Site and Environs (Map data: © 2019 Google)

3.2 Site layout: The site comprises two grass fields, separated by an electric fence. The north field was being used for horse grazing on the date of the survey. Trees are sporadically located along the northern and western site boundaries and also in the eastern half of the south field. Measurements and information for each tree can be viewed in the Tree Survey Schedule in Appendix 2.

3.3 Tree categorisation summary: A total of forty trees, four tree groups and three hedgerows were surveyed and recorded in the Tree Survey Schedule.

Table 2: Tree categorisation summary

Categorisation	Individual tree	Tree group	Hedgerow
A	–	–	–
B	17	–	–
C	18	4	3
U	5	–	–
Total	40	4	3

3.4 **Statutory tree protection:** Arun District Council's online mapping tool was used on 27th November 2019 to establish restrictions to tree works at the site. No tree preservation order (TPO) was shown to protect the trees in this site and the site is not located within a conservation area. The Yapton, Main Road & Church Lane Conservation Area extends up to the south-east corner of the site, to the boundaries of residential properties located on The Croft, but does not protect any trees surveyed for this report.

3.5 However, any persons proposing to undertake tree works should still check the status of the trees with the local authority, and gain the necessary consent before the works are undertaken. Financial penalties and/or criminal proceedings can result if tree works are carried out on a protected tree without consent. The entirety of the tree is protected, both above and below ground.

4 RECOMMENDATIONS

4.1 Arboricultural input to planning application: To comply with BS5837: 2012, an arboricultural impact assessment should be produced when the proposed layout has been fixed. The arboricultural impact assessment should include a schedule of trees to be retained or removed as well as access facilitation pruning required to enable the construction works. It should also evaluate the likely effects of the construction works on retained trees including post development pressures and provide recommendations on mitigation measures to be implemented.

4.2 It is recommended that input is sought from the project arboriculturist into the proposed layout before it is fixed. This will help ensure the proposed layout integrates well with the retained tree stock, and will allow potential areas of conflict that may not be identified by non-arboricultural professionals to be rectified whilst the layout is being developed.

4.3 The arboricultural impact assessment should be accompanied by an arboricultural method statement and a dimensioned Tree Protection Plan to show how retained trees will be protected during the construction period.

4.4 Arboricultural considerations for proposed layout: The proposed layout should take into account the following considerations related to trees:

- The proposed layout should seek to retain higher quality trees, particularly those that cannot easily be replaced. Where tree removal is necessary to facilitate the wider regeneration benefits associated with development, a tree replacement strategy could be implemented to mitigate tree loss. The loss of prominent or high quality trees, or net loss in tree cover within a development site will not be looked on favourably when determining a planning application.
- The proposed layout should take into account the root protection areas of retained trees. These should be left free of construction activities including hard landscaping unless the project arboriculturist confirms engineered solutions or sympathetic construction methodology will be a viable option to mitigate the encroachment.
- The proposed layout should take into account the shade cast by trees. Over-shading of gardens and buildings (notably habitable rooms) can result in future pressures to prune or remove additional trees post development, and will be a material consideration for the local authority when determining a planning application.
- The proposed layout should also take into account other common potential nuisances associated with trees including leaf/fruit drop or honeydew drip (particularly onto footpaths, parking areas or roof guttering) and an over-bearing presence of large trees.
- Allowance should be made for future canopy growth of both existing and newly planted trees. Trees growing in areas of limited space may require regular future pruning works. The suitability of different species for regular crown reductions, the affect on their amenity value and the cost of future tree works (as well as who would be responsible for undertaking the works) should be considered.

4.5 The final design should show service locations and their routing. These are often not specified for outline planning applications, however their position has the potential to have a significant impact on retained trees and therefore should be noted in the detailed arboricultural method statement that accompanies a full planning application. New utilities should be located outside of the trees root protection areas where they are underground and outside of the anticipated area of mature crown spread where above ground. Sympathetic methodology to enable the installation of services within root protection areas (in certain instances) is available, however there will always be a potential arboricultural impact and arboricultural advice must be sought regarding the suitability of these methods before they are relied upon. If it is achievable the root protection areas should always be avoided.

4.6 If further tree planting occurs within the development site, consideration should be given to species selection (in relation to form and potential size) and planting locations to ensure their successful integration into the new development. Recommendations for mitigation tree planting may be included in the arboricultural impact assessment, or a more thorough landscaping strategy may be provided by a landscape designer/architect.

Contact details

Sussex office:

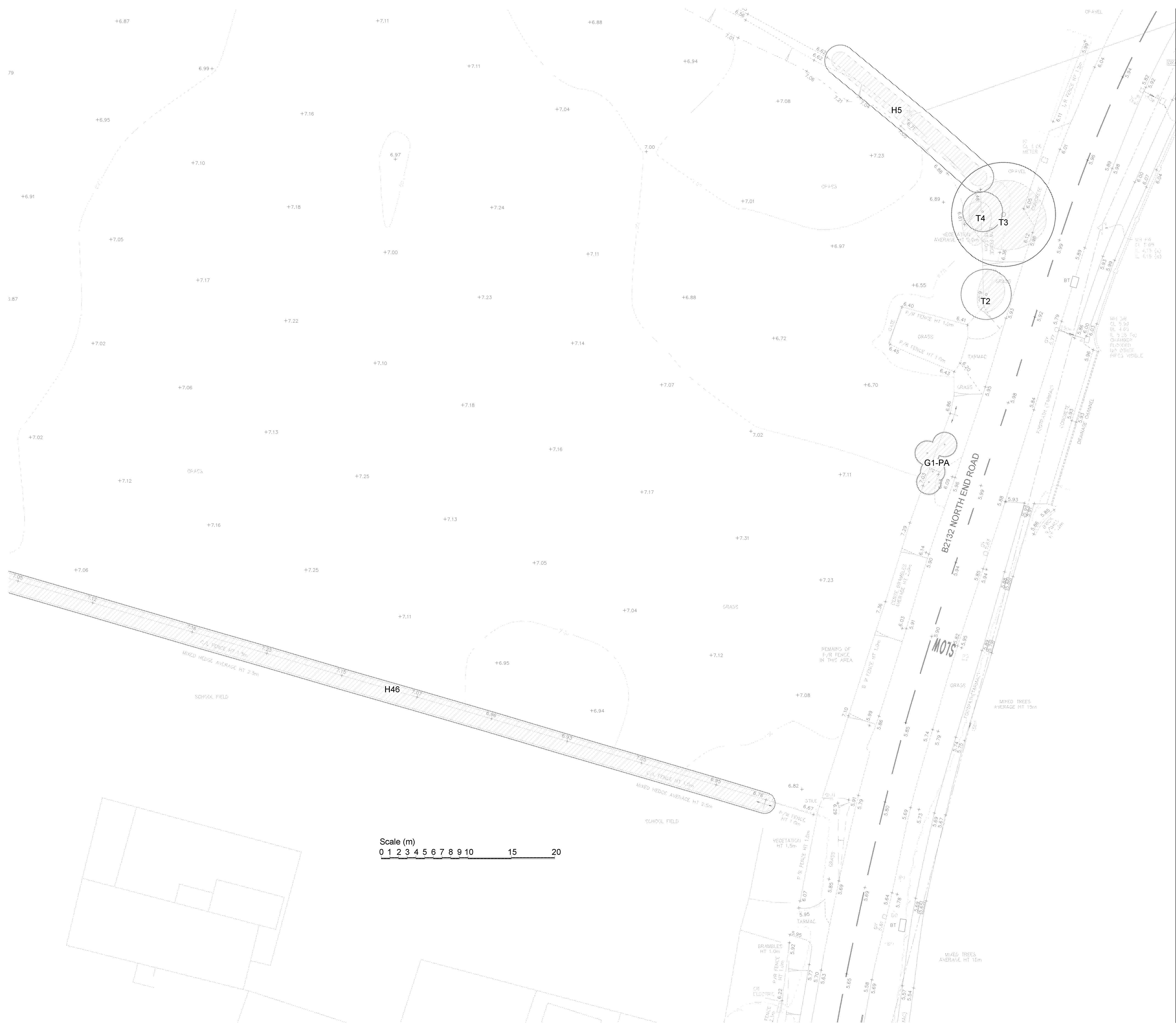
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Author: Peter Davies

Date: 27th November 2019

APPENDIX 1

Tree Constraints Plan



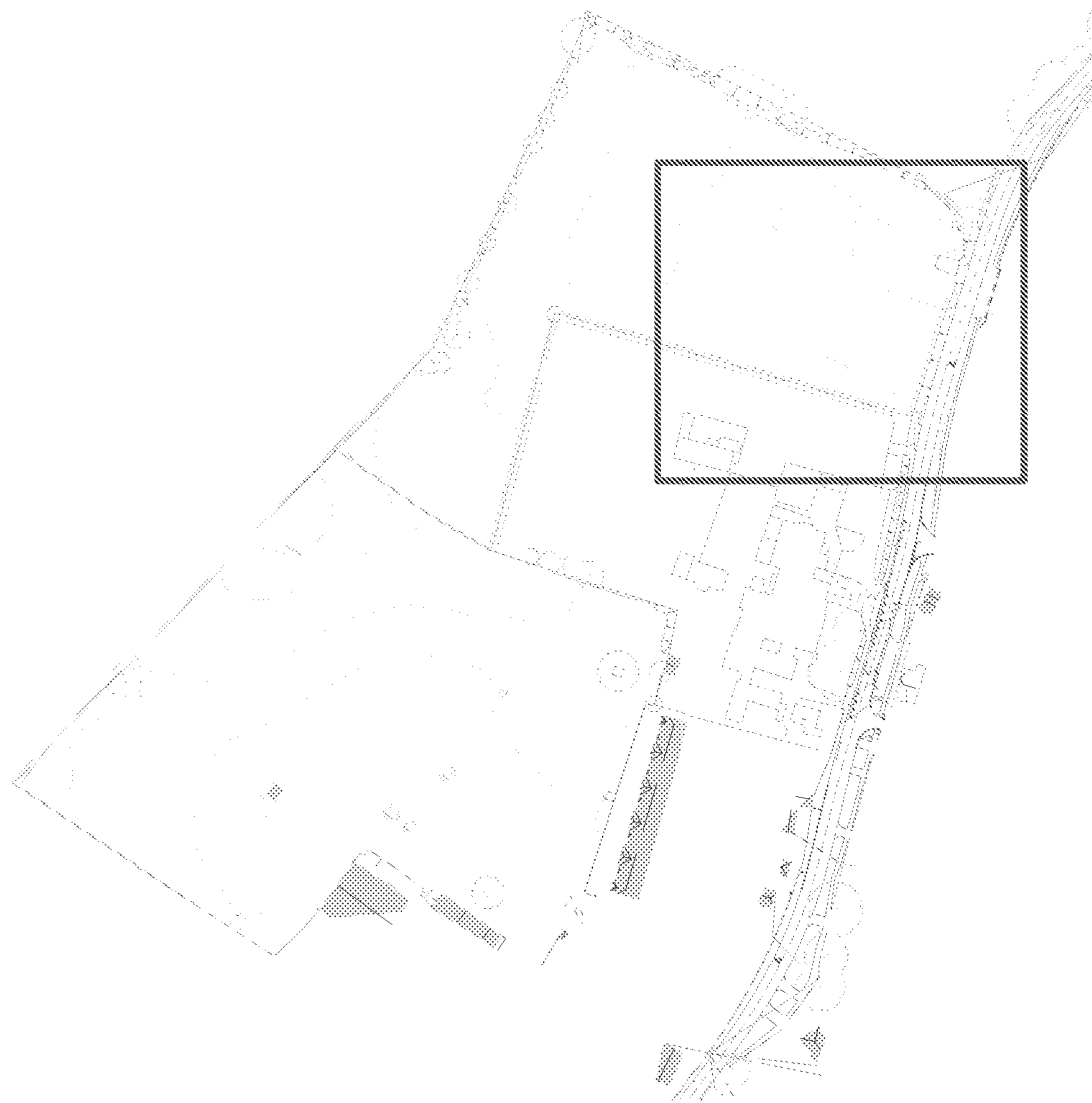
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- Root protection area for category B* tree
 - Root protection area for category C* tree
 - Root protection area for category U* tree
 - Tree canopy

* Tree categorised in accordance with BS 5837:2012 'Trees in relation to design, demolition and construction - Recommendations'.

Appendix 2, (Tree Survey Schedule) contained within the arboricultural report ref. PJC/5401/19-01 contains further information for each tree.

This drawing should be viewed in colour.

Tree numbers suffixed with PA indicate the tree position is approximate.



Scale (m)
0 1 2 3 4 5 6 7 8 9 10 15 20

Drawing no: PJC/5401/19/A Rev: - Sheet number: 1 of 6

Client and site:
Dandara

Land at North End Road
Yapton
West Sussex

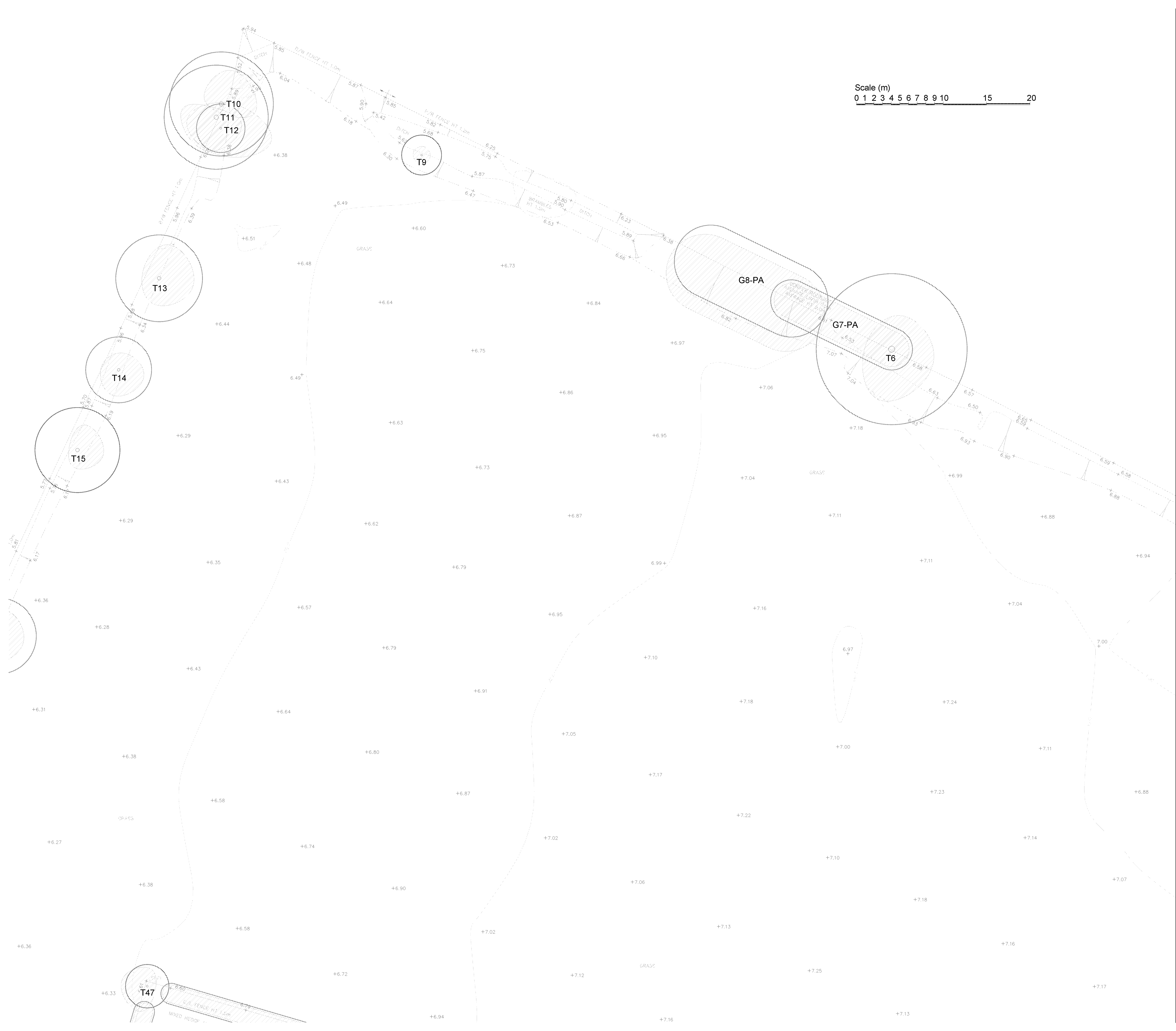
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Date drawn: 27/11/2019

Scale: 1:200 at A1

Drawn by: PD

Checked by: NB



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Drawing no: PJC/5401/19/A Rev: - Sheet number: 2 of 6

Client and site:
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Land at North End Road
Yapton
West Sussex

Drawing title: Tree Constraints Plan

Date drawn: 27/11/2019

Scale: 1:200 at A1

Drawn by: PD

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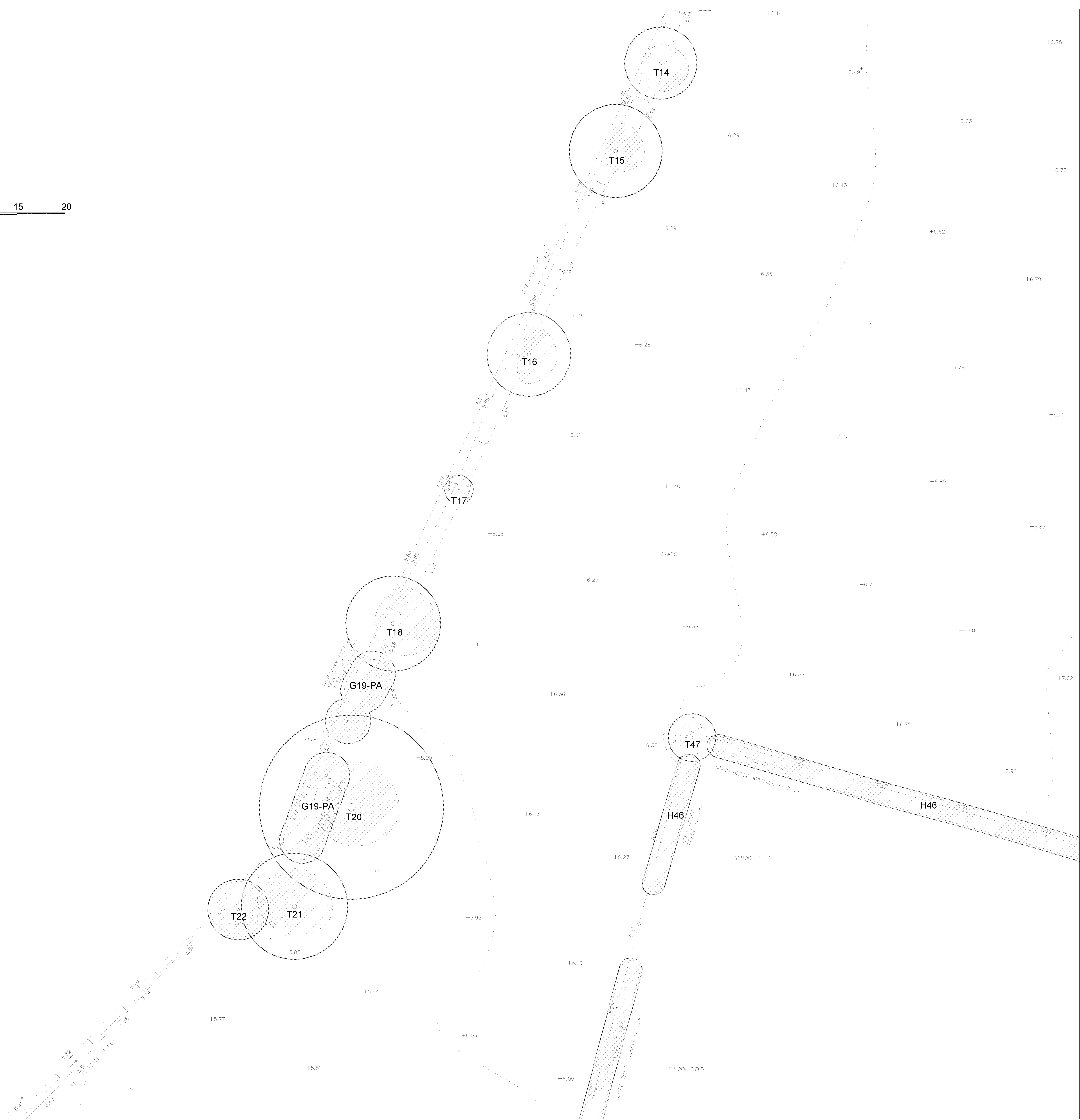
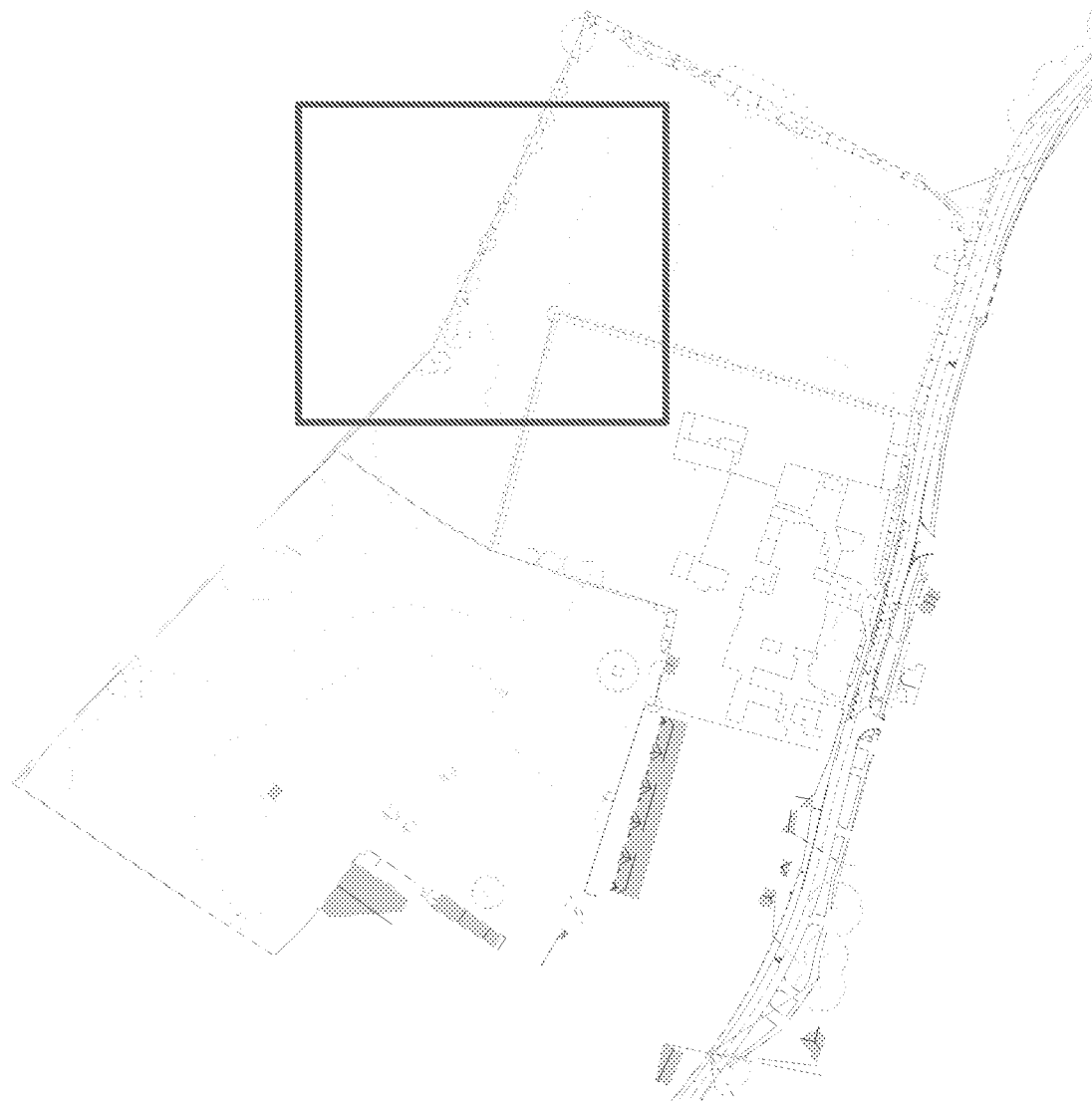
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Drawing no: PJC/5401/19/A Rev: - Sheet number: 3 of 6

Client and site:
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Land at North End Road
Yapton
West Sussex

Drawing title: Tree Constraints Plan

Date drawn: 27/11/2019

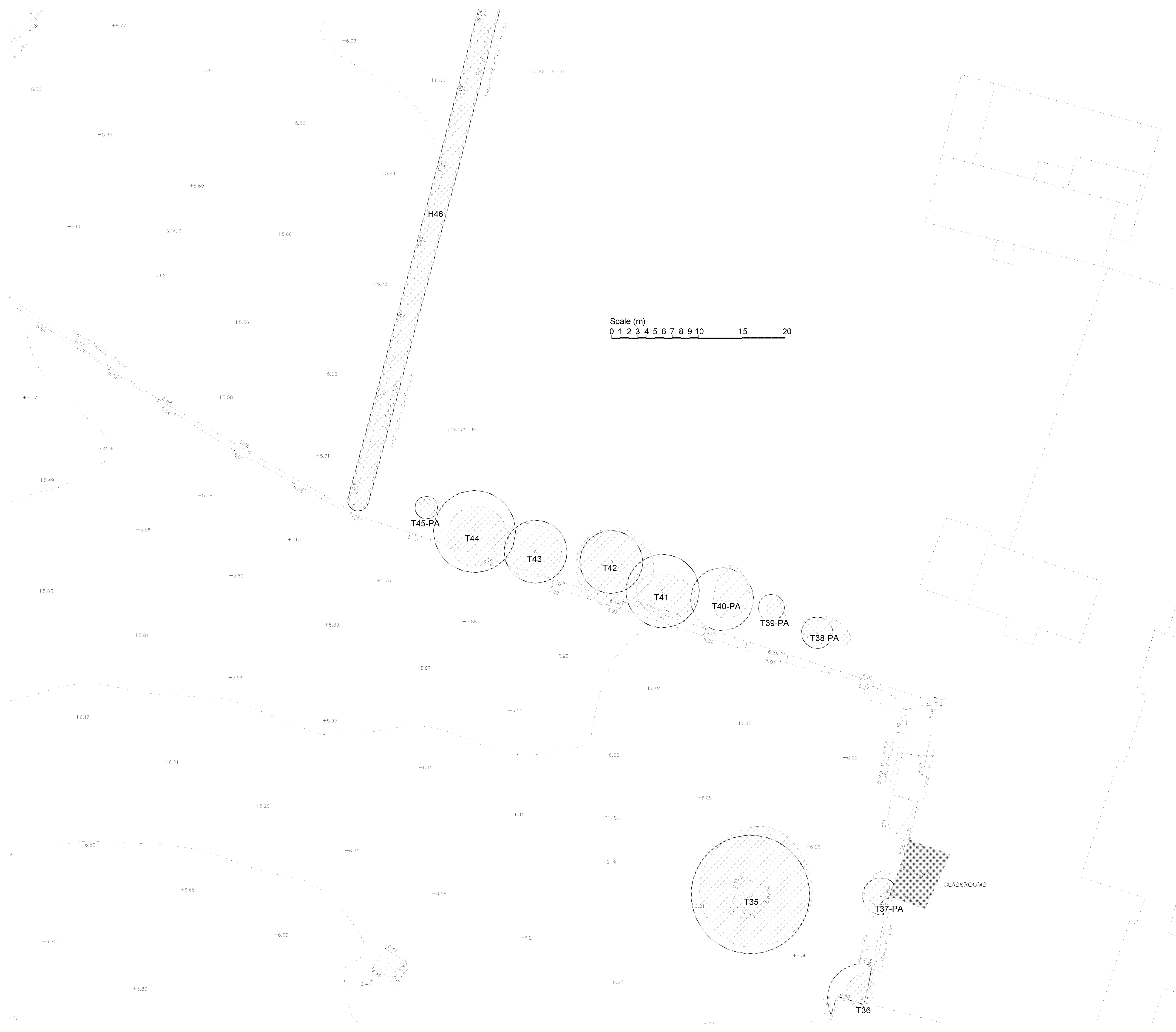
Scale: 1:200 at A1

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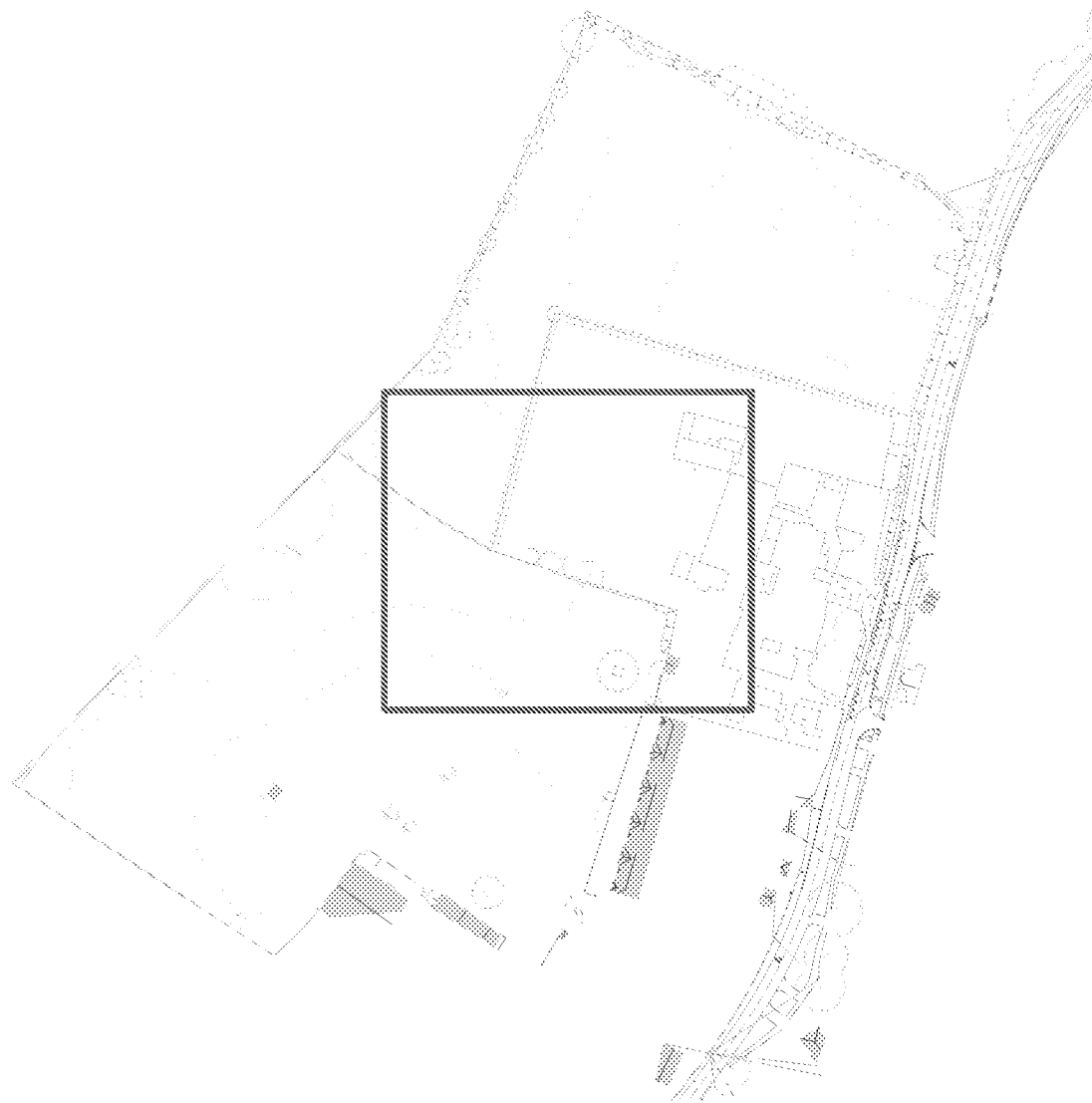
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Drawing no: PJC/5401/19/A Rev: - Sheet number: 4 of 6

Client and site:
Dandara

Land at North End Road
Yapton
West Sussex

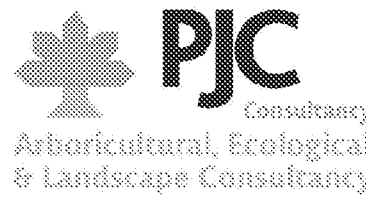
Drawing title: Tree Constraints Plan

Date drawn: 27/11/2019

Scale: 1:200 at A1

Drawn by: PD

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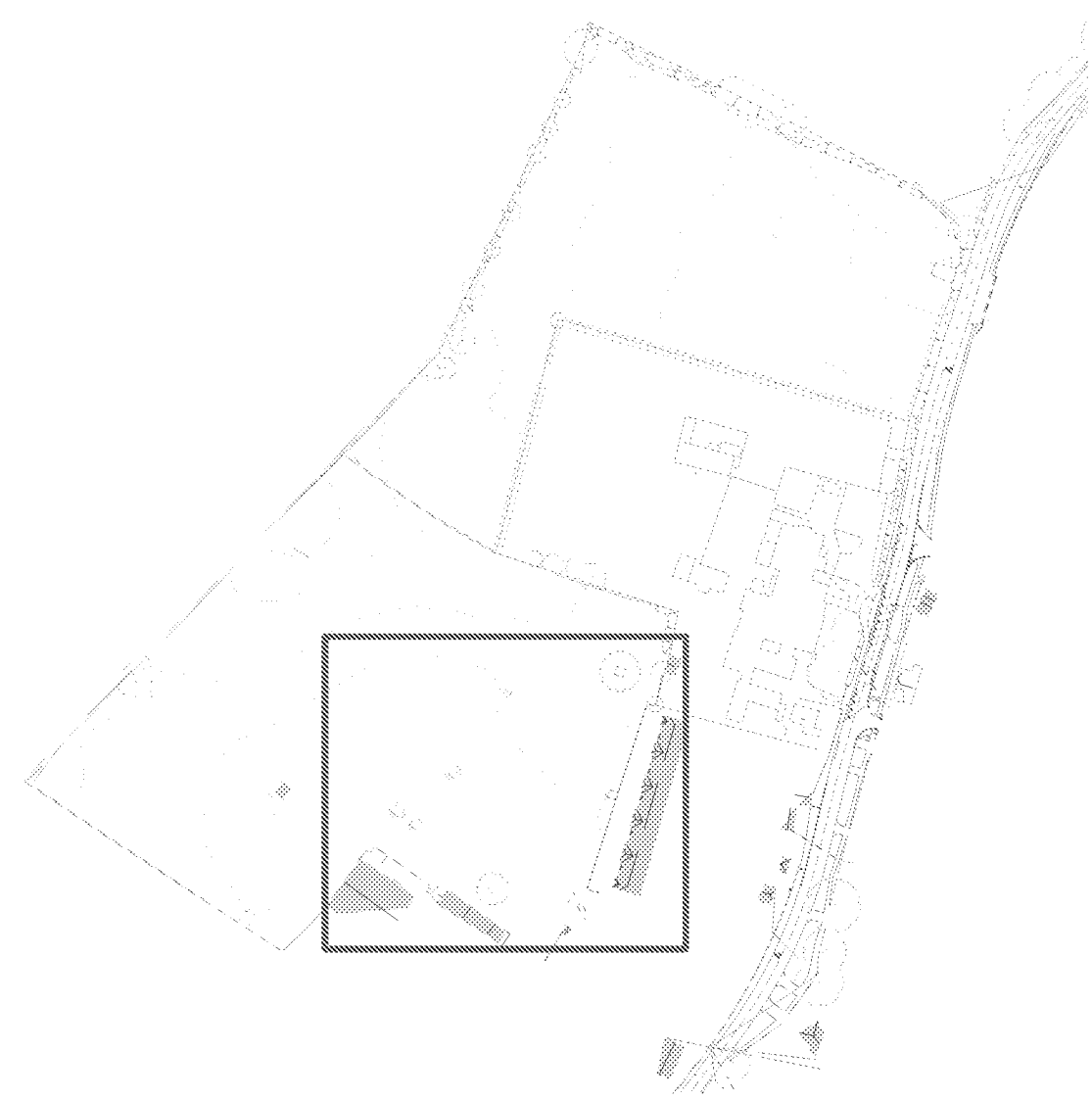
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Drawing no: PJC/5401/19/A Rev: - Sheet number: 5 of 6

Client and site:
Dandara

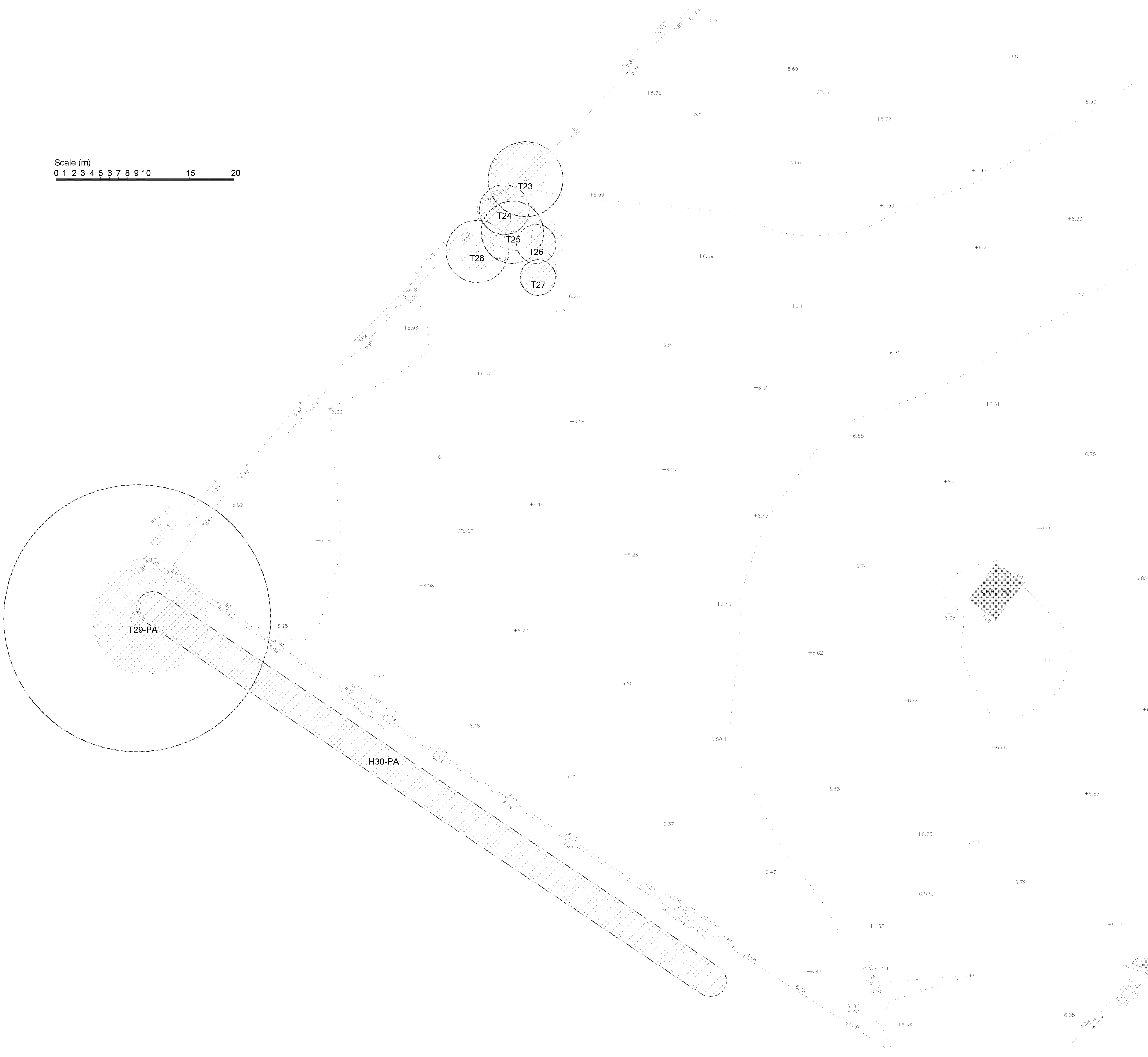
Land at North End Road
Yapton
West Sussex

Drawing title: Tree Constraints Plan

Date drawn: 27/11/2019

Scale: 1:200 at A1

Drawn by: PD Checked by: NB



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Client and site:
Dandara

Land at North End Road
Yapton
West Sussex

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Scale: 1:200 at A1

Drawn by: PD

Checked by: NB

APPENDIX 2

Tree Survey Schedule

Site: North End Road, Yapton

Tree Survey Schedule



Survey date: 25/11/2019

Surveyor: Peter Davies

Tree ref.	Species	Height (m)	Stem diameter (mm)	Branch spread (m)	Crown clearance (m)	Age class	Physiological condition	Structural condition	Comments	Preliminary management recommendations	Category grading	Root Protection Area (m ²)	Root Protection Radius (m)
G1	Elm (Ulmus procera)	4-5 average	Up to 120 average	1-2 average	1-2 average	Young	Good	Fair	Group of four small elm suckers by road frontage.	No action required on date of survey.	C1	6.5 average	14 average
T2	Hawthorn (Crataegus monogyna)	4	150, 120, 100, 80, 80 est	N: 3 E: 2 S: 2 W: 1	Crown: 1 average Branch: 1 average	Mature	Good	Fair	Multi-stemmed from 1m. Ivy clad. Flailed from field.	No action required on date of survey.	C1+2	27.0	2.9
T3	Sycamore (Acer pseudoplatanus)	9	500 est	N: 4 E: 5 S: 4 W: 4	Crown: 2 average Branch: 2 average	Mature	Poor	Poor	Extensive crown dieback (tree almost dead). Centre of gravity slightly towards road and tree in falling distance of road.	Fell to ground level.	U	113.1	6.0
T4	Hawthorn (Crataegus monogyna)	3	150, 120 est	N: 1 E: 1 S: 4 W: 2	Crown: 2 average Branch: 1 west	Semi mature	Fair	Poor	Suppressed growth habit. Ivy encroaches crown. Crown pruned from field.	No action required on date of survey.	C1	16.7	2.3
H5	Leyland cypress (Cupressus x leylandii)	2	Up to 150 average	1 average	1 average	Semi mature	Good	Good	Third party, managed cypress hedgerow. Part ivy clad.	No action required on date of survey.	C2	10.2 average	1.8 average
T6	Leyland cypress (Cupressus x leylandii)	11	450, 400, 400 est	N: 4 E: 5 S: 6 W: 3	Crown: 2 average Branch: 1 south	Mature	Good	Fair	Third party tree viewed from site. Multi-stemmed from 1m with fused stem unions. Post and rail fence conflicts with stem.	No action required on date of survey.	C1	236.4	8.7

Site: North End Road, Yapton

Tree Survey Schedule



Survey date: 25/11/2019

Surveyor: Peter Davies

Tree ref.	Species	Height (m)	Stem diameter (mm)	Branch spread (m)	Crown clearance (m)	Age class	Physiological condition	Structural condition	Comments	Preliminary management recommendations	Category grading	Root Protection Area (m ²)	Root Protection Radius (m)
G7	Leyland cypress (Cupressus x leylandii)	6-8 average	Up to 200 average	2 average	1-3 average	Early mature	Good	Fair	Sporadic, third party cypress screen viewed from site. Limited screening benefit due to large gaps in foliage.	No action required on date of survey.	C1	18.1 average	2.4 average
G8	Leyland cypress (Cupressus x leylandii)	8-10 average	Up to 350 average	N: 3 E: 3 S: 6 W: 4	2 average	Early mature	Good	Fair	Third party cypress screen viewed from site. Crown raised/grazed over site.	No action required on date of survey.	C1+2	55.4 average	4.2 average
T9	Hawthorn (Crataegus monogyna)	4	150, 120	N: 1 E: 1 S: 1 W: 1	Crown: 0 average Branch: 0 average	Mature	Poor	Poor	Significant crown dieback. Short predicted life span.	No action required on date of survey.	U	16.7	2.3
T10	Leyland cypress (Cupressus x leylandii)	18	500 est	N: 4 E: 4 S: 1 W: 2	Crown: 2 average Branch: 2 average	Mature	Fair	Fair	Potentially third party tree. Bark necrosis on stem. Isolated patches of dieback in crown (possible Seiridium canker)	Monitor vitality of tree. Reduce crown to 12m if frequency of access in target area increases.	C1	113.1	6.0
T11	Leyland cypress (Cupressus x leylandii)	12	500 eW	N: 1 E: 3 S: 4 W: 4	Crown: 0 west Branch: 0 average	Mature	Fair	Poor	Potentially third party tree. Minor crown dieback. Large snapped limbs in upper crown.	Remove snapped limbs from crown.	C1	113.1	6.0
T12	Blackthorn (Prunus spinosa)	5	230	N: 3 E: 6 S: 3 W: 4	Crown: 1 average Branch: 1 west	Mature	Fair	Poor	Low spreading habit due to suppression from T10/T11. Significant wounding on stem.	No action required on date of survey.	U	23.9	2.8

Site: North End Road, Yapton

Tree Survey Schedule

Survey date: 25/11/2019

Surveyor: Peter Davies



Tree ref.	Species	Height (m)	Stem diameter (mm)	Branch spread (m)	Crown clearance (m)	Age class	Physiological condition	Structural condition	Comments	Preliminary management recommendations	Category grading	Root Protection Area (m ²)	Root Protection Radius (m)
T13	Hawthorn (Crataegus monogyna)	6	120 average x12 stems	N: 4 E: 4 S: 3 W: 2	Crown: 0 south Branch: 1 west	Mature	Good	Fair	Multi-stemmed. Small deadwood and low snapped limbs.	No action required on date of survey.	C1	78.2	5.0
T14	Hawthorn (Crataegus monogyna)	5	130 average x6 stems	N: 2 E: 3 S: 3 W: 2	Crown: 1 average Branch: 1 average	Mature	Good	Fair	Multi-stemmed. Small deadwood and low snapped limbs.	No action required on date of survey.	C1	45.9	3.8
T15	Hawthorn (Crataegus monogyna)	5	130 average x10 stems	N: 3 E: 3 S: 2 W: 1	Crown: 1 average Branch: 1 east	Over mature	Good	Poor	Multi-stemmed from 1m. Significant basal decay.	Fell to ground level if frequency of access in target area increases.	U	76.5	4.9
T16	Hawthorn (Crataegus monogyna)	5	150 average x6 stems	N: 3 E: 3 S: 3 W: 1	Crown: 1 average Branch: 1 average	Mature	Good	Fair	Multi-stemmed. Minor basal cavity.	No action required on date of survey.	C1	61.1	4.4
T17	Field maple (Acer campestre)	4	60, 60, 60, 70	N: 2 E: 1 S: 0 W: 1	Crown: 0 north Branch: 0 north	Young	Good	Fair	Multi-stemmed from 0.5m. Lower crown significantly damaged by horse grazing.	No action required on date of survey.	C1	7.1	1.5
T18	Field maple (Acer campestre)	8	420	N: 4 E: 5 S: 3 W: 2	Crown: 1 north Branch: 1 north	Early mature	Good	Fair	Dual stemmed. Fused stems to 2m. Lower crown grazed by horses and flailed from adjacent field.	No action required on date of survey.	B1	79.8	5.0

Site: North End Road, Yapton

Tree Survey Schedule



Survey date: 25/11/2019

Surveyor: Peter Davies

Tree ref.	Species	Height (m)	Stem diameter (mm)	Branch spread (m)	Crown clearance (m)	Age class	Physiological condition	Structural condition	Comments	Preliminary management recommendations	Category grading	Root Protection Area (m ²)	Root Protection Radius (m)
G19	Hawthorn (Crataegus monogyna)	5-7 average	Up to 200 average	1-3 average	0-1 average	Semi-early mature	Good	Fair	Sporadic hawthorn group along site boundary.	No action required on date of survey.	C2	18.1 average	2.4 average
T20	Lime (Tilia x europaea)	12	350, 400, 330, 300, 410	N: 5 E: 5 S: 4 W: 4	Crown: 2 average Branch: 3 average	Mature	Good	Fair	5x stems from 0.5-1m, all with included bark in the stem unions. Well formed crown. Exposed buttress roots.	No action required on date of survey.	B1	293.8	9.7
T21	Hornbeam (Carpinus betulus)	10	410, 220 at 1m	N: 4 E: 4 S: 3 W: 4	Crown: 2 average Branch: 0 north	Early mature	Good	Fair	Multi-stemmed. Reasonable condition. Previously crown lifted on west side.	No action required on date of survey.	B1	97.9	5.6
T22	Ash (Fraxinus excelsior)	8	180, 200 est	N: 3 E: 3 S: 3 W: 3	Crown: 2 east Branch: 2 east	Early mature	Good	Good	Bramble under-storey prevents direct access to survey stems. Well formed crown.	No action required on date of survey.	B1	32.8	3.2
T23	Pedunculate oak (Quercus robur)	12	350	N: 4 E: 2 S: 2 W: 4	Crown: 2 west Branch: 3 west	Early mature	Good	Fair	Secondary stem historically removed from base. Asymmetric crown due to stem removal and suppression. No major visible defects.	No action required on date of survey.	B1+2	55.4	4.2
T24	Ash (Fraxinus excelsior)	12	230	N: 2 E: 1 S: 3 W: 3	Crown: 1 west Branch: 2 west	Early mature	Good	Fair	Abundant deadwood in lower crown, likely due to suppression.	Remove deadwood over 75mm diameter and/or 1m length if frequency of access in target area increases.	B2	23.9	2.8

Site: North End Road, Yapton

Tree Survey Schedule



Survey date: 25/11/2019

Surveyor: Peter Davies

Tree ref.	Species	Height (m)	Stem diameter (mm)	Branch spread (m)	Crown clearance (m)	Age class	Physiological condition	Structural condition	Comments	Preliminary management recommendations	Category grading	Root Protection Area (m ²)	Root Protection Radius (m)
T25	Ash (Fraxinus excelsior)	12	210, 200	N: 4 E: 3 S: 2 W: 3	Crown: 1 north Branch: 2 average	Early mature	Good	Fair	Dual stemmed. Drawn up growth habit due to group pressures. Minor deadwood on south side of crown.	No action required on date of survey.	S2	38.0	3.5
T26	Ash (Fraxinus excelsior)	9	180	N: 3 E: 3 S: 0 W: 0	Crown: 1 average Branch: 2 east	Semi mature	Good	Fair	Suppressed growth habit. Minor deadwood on south side of crown.	No action required on date of survey.	C2	14.7	2.2
T27	Ash (Fraxinus excelsior)	9	170	N: 3 E: 2 S: 2 W: 2	Crown: 1 average Branch: 2 north	Semi mature	Good	Fair	Drawn up growth habit. No major visible defects.	No action required on date of survey.	S2	13.1	2.0
T28	Hawthorn (Crataegus monogyna)	6	120 average x6 stems	N: 2 E: 2 S: 2 W: 2	Crown: 0 average Branch: 0 average	Early mature	Good	Good	Multi-stemmed. Typical example of species.	No action required on date of survey.	C1+2	39.1	3.5
T29	Monterey cypress (Cupressus macrocarpa)	15	1500 est	N: 7 E: 8 S: 6 W: 5	Crown: 3 average Branch: 3 average	Over mature	Poor	Poor	Third party tree viewed from site. Significant dieback on south side of crown. Shear crack in primary limb on east side.	Suggest undertaking detailed condition survey if frequency of access within target area increases.	U	707.0	15.0
H30	Mixed (hawthorn dominant, elder, blackthorn)	4-5 average	Up to 150 average	1-2 average	0 average	Semi-early mature	Fair	Fair	Third party hedgerow viewed from site. Clad with bramble and ivy. Largely managed.	No action required on date of survey.	C2	10.2 average	1.8 average

Site: North End Road, Yapton

Tree Survey Schedule

Survey date: 25/11/2019

Surveyor: Peter Davies



Tree ref.	Species	Height (m)	Stem diameter (mm)	Branch spread (m)	Crown clearance (m)	Age class	Physiological condition	Structural condition	Comments	Preliminary management recommendations	Category grading	Root Protection Area (m²)	Root Protection Radius (m)
T31	Horse chestnut (Aesculus hippocastanum)	5	210	N: 3 E: 2 S: 2 W: 2	Crown: 1 average Branch: 0 south	Semi mature	Good	Good	Small, well formed tree protected from horse grazing by post and rail fence.	No action required on date of survey.	S1	20.0	2.5
T32	Horse chestnut (Aesculus hippocastanum)	3	80, 80, 40, 40 est	N: 2 E: 2 S: 1 W: 1	Crown: 1 average Branch: 1 average	Young	Good	Good	Small, well formed tree protected from horse grazing by post and rail fence.	No action required on date of survey.	C1	7.2	1.5
T33	Lime (Tilia x europaea)	7	300 est	N: 4 E: 3 S: 3 W: 3	Crown: 1 average Branch: 0 average	Early mature	Good	Fair	Small, well formed tree protected from horse grazing by post and rail fence. Profuse basal epicormic growth.	Consider removing basal epicormic growth for predominantly aesthetic reasons.	S1	40.7	3.6
T34	Beech (Fagus sylvatica)	9	350 est	N: 3 E: 5 S: 5 W: 5	Crown: 2 average Branch: 2 south	Early mature	Good	Good	Single stemmed. Lightly ivy clad. Well formed crown. Bay shrub growing from base.	No action required on date of survey.	B1+2	55.4	4.2
T35	Ash (Fraxinus excelsior)	11	570 at 1m	N: 8 E: 7 S: 6 W: 6	Crown: 1 north Branch: 1 north	Mature	Good	Good	Multi-stemmed from 1.5m. Open grown habit. No major visible defects.	Remove hanging snapped limb if frequency of access in target area increases.	B1+2	147.0	6.8
T36	Elder (Sambucus nigra)	6	200 est	N: 3 E: 1 S: 1 W: 2	Crown: 1 north Branch: 1 north	Mature	Good	Fair	Ivy encroaches crown. Root morphology likely impacted by boundary wall.	Sever ivy around base.	C1	18.1	2.4 (amended on Tree Constraints Plan)

Site: North End Road, Yapton

Tree Survey Schedule



Survey date: 25/11/2019

Surveyor: Peter Davies

Tree ref.	Species	Height (m)	Stem diameter (mm)	Branch spread (m)	Crown clearance (m)	Age class	Physiological condition	Structural condition	Comments	Preliminary management recommendations	Category grading	Root Protection Area (m ²)	Root Protection Radius (m)
T37	Buddleia (Buddleja davidii)	3	150 est	N: 3 E: 0 S: 1 W: 2	Crown: 0 north Branch: 0 north	Semi mature	Good	Fair	Shrub by boundary wall.	No action required on date of survey.	C1	10.2	1.8 (amended on Tree Constraints Plan)
T38	Silver birch (Betula pendula)	7	150 est	N: 2 E: 4 S: 1 W: 2	Crown: 2 east Branch: 2 east	Semi mature	Good	Good	Third party tree viewed from site.	No action required on date of survey.	C1	10.2	1.8
T39	Rowan (Sorbus aucuparia)	4	100, 70 est	N: 1 E: 2 S: 1 W: 0	Crown: 1 east Branch: 1 east	Young	Good	Fair	Third party tree viewed from site. Dual stemmed.	No action required on date of survey.	C1	6.7	1.5
T40	Sorbus spp.	7	90 average x11 est	N: 4 E: 3 S: 2 W: 1	Crown: 2 average Branch: 0 average	Early mature	Good	Fair	Third party tree viewed from site. Multi-stemmed from base. Slightly suppressed form.	No action required on date of survey.	C1	40.3	3.6
T41	Italian alder (Alnus cordata)	11	350 est	N: 4 E: 3 S: 2 W: 2	Crown: 2 average Branch: 2 average	Mature	Good	Good	Third party tree viewed from site. Typical example of species.	No action required on date of survey.	B1	55.4	4.2
T42	Weeping willow (Salix babylonica)	7	300 est	N: 4 E: 5 S: 5 W: 4	Crown: 1 average Branch: 2 average	Early mature	Good	Good	Third party tree viewed from site. Typical example of species.	No action required on date of survey.	B1	40.7	3.6

Site: North End Road, Yapton

Tree Survey Schedule



Survey date: 25/11/2019

Surveyor: Peter Davies

Tree ref.	Species	Height (m)	Stem diameter (mm)	Branch spread (m)	Crown clearance (m)	Age class	Physiological condition	Structural condition	Comments	Preliminary management recommendations	Category grading	Root Protection Area (m ²)	Root Protection Radius (m)
T43	Pedunculate oak (Quercus robur)	6	300 est	N: 3 E: 3 S: 3 W: 5	Crown: 2 average Branch: 2 south	Semi mature	Good	Good	Third party tree viewed from site. Previously crown lifted.	No action required on date of survey.	S1	40.7	3.6
T44	Cherry (Prunus avium)	8	300, 250 est	N: 3 E: 4 S: 4 W: 3	Crown: 2 average Branch: 1 average	Early mature	Good	Good	Third party tree viewed from site. Multi-stemmed from 1m.	No action required on date of survey.	S1	69.0	4.7
T45	Silver birch (Betula pendula)	4	80, 70 est	N: 1 E: 1 S: 1 W: 1	Crown: 1 east Branch: 1 north	Young	Good	Good	Third party sapling viewed from site.	No action required on date of survey.	C1	5.1	1.3
H46	Mixed (elder, field maple, hazel, privet)	2.5 average	Up to 100 average	1 average	0 average	Semi mature	Good	Good	Flailed, third party hedgerow within school boundary.	No action required on date of survey.	C2	4.5 average	1.2 average
T47	Pedunculate oak (Quercus robur)	6	210 over ivy	N: 2 E: 1 S: 3 W: 3	Crown: 3 average Branch: 2 average	Semi mature	Good	Fair	Third party tree growing within H46. Crown lifted over PROW within site.	No action required on date of survey.	S1	20.0	2.5

APPENDIX 3

Cascade Chart for Tree Quality Assessment

Cascade chart for tree quality assessment

Category and definition	Criteria (including subcategories where appropriate)			Identification on plan
Trees unsuitable for retention				
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of their current land use for longer than 10 years.	• Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after the removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning). • Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline. • Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality. Note Category U trees can have existing or potential conservation value which it might be desirable to preserve			Red
	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation	
Trees to be considered for retention				
Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years.	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue).	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features.	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood–pasture).	Green
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remedial defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation.	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality.	Trees with material conservation or other cultural value.	Blue
Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits.	Trees with no material conservation or other cultural value.	Grey

APPENDIX 4

Photographs



Photograph 1 – Tree T3.



Photograph 2 – Tree T6–G8.



Photograph 3 – Trees T10–T12.



Photograph 4 – Trees T10–T16.



Photograph 5 – Trees T18–T21.



Photograph 6 – Trees T21 and T22.



Photograph 7 – Trees T23–T28.



Photograph 8 – Tree T29.



Photograph 9 – Tree T35.



Photograph 10 – Trees T38–T45.